

What is claimed is:

1. A golf putter for putting a ball, the golf putter comprising:
a putter body having a centrally positioned transition plane that demarcates the putter body into a heel region and a toe region, the putter body being formed substantially from a material having a first specific gravity, the putter body including a sole region that defines a first sole cavity;

a heel weight that is secured to the heel region, the heel weight being formed substantially from a material having a second specific gravity that is greater than the first specific gravity;

a toe weight that is secured to the toe region, the toe weight being spaced apart from the heel weight, the toe weight being formed substantially from a material having a third specific gravity that is greater than the first specific gravity; and

a first sole insert that is inserted into the first sole cavity, the first sole insert being formed substantially from a material having a fourth specific gravity that is greater than the first specific gravity.

2. The golf putter of claim 1 wherein the first sole insert is positioned partly in the heel region and partly in the toe region.

3. The golf putter of claim 1 wherein the heel weight has a weight that is substantially similar to a weight of the toe weight.

4. The golf putter of claim 1 wherein the sole region includes a sole surface, the first sole cavity being entirely disposed in the sole surface.

5. The golf putter of claim 1 wherein the second specific gravity and the third specific gravity are each substantially similar to the fourth specific gravity.

6. The golf putter of claim 1 wherein the heel weight, the toe weight and the first sole insert each includes a center of gravity, and wherein the center of gravity of the heel weight, the toe weight and the first sole insert form vertices of a triangle having two sides that are approximately the same length.

7. The golf putter of claim 6 wherein the putter body includes a face region that strikes the ball during putting and a back region, and wherein the triangle defines a plane that is angled in a downwardly direction moving from the face region toward the back region.

8. The golf putter of claim 7 wherein the sole region has a sole surface, and wherein the triangle forms an angle with the sole surface that is greater than approximately 5 degrees and less than approximately 45 degrees.

9. The golf putter of claim 1 wherein the fourth specific gravity is at least 50% greater than the first specific gravity.

10. The golf putter of claim 1 further comprising a second sole insert, and wherein the sole region defines a second sole cavity that receives the second sole insert.

11. The golf putter of claim 10 wherein the first sole insert has a different volume than the second sole insert.

12. The golf putter of claim 10 wherein at least one of the sole inserts is positioned partly in the heel region and partly in the toe region.

13. The golf putter of claim 10 wherein the second sole insert is formed substantially from a material having a sixth specific gravity that is lower than the fourth specific gravity.

14. The golf putter of claim 13 wherein the fourth specific gravity is at least 300% greater than the sixth specific gravity.

15. The golf putter of claim 10 wherein at least one of the sole inserts is substantially wedge-shaped.

16. The golf putter of claim 1 wherein the putter body includes an upper cavity, the golf putter further comprising an upper region insert that is positioned in the upper cavity, the upper region insert substantially facing an opposite direction from the first sole insert, the upper region insert having a substantially circular shape.

17. The golf putter of claim 16 wherein the upper region insert has a diameter of greater than approximately 1.00 inches and less than 1.60 inches.

18. The golf putter of claim 17 wherein the upper region insert includes an alignment guide to align the putter body with the ball prior to striking the ball.

19. The golf putter of claim 18 wherein the alignment guide is positioned substantially perpendicularly to an axis that extends between the heel weight and the toe weight.

20. The golf putter of claim 19 wherein the putter body includes a V-shaped alignment channel that defines a plane that is positioned substantially orthogonally to the alignment guide.

21. The golf putter of claim 16 wherein the upper region insert is formed substantially from a material having a seventh specific gravity that is lower than the first specific gravity.

22. The golf putter of claim 1 wherein the face region includes a face surface that strikes the ball, and wherein the heel insert is positioned within the heel cavity so that an exterior surface of the heel insert is flush with the face surface.

23. A golf putter for putting a ball, the golf putter comprising:

a putter body having a centrally positioned transition plane that demarcates the putter body into a heel region and a toe region, the putter body including a sole region that defines a first sole cavity and a second sole cavity, each sole cavity being positioned partly in the heel region and partly in the toe region; demarcation

a first sole insert that is inserted into the first sole cavity; and
a second sole insert that is inserted into the second sole cavity.

24. The golf putter of claim 23 wherein the sole region has a sole surface that substantially faces the surface while putting, the sole surface defining a perimeter of the first sole cavity and a perimeter of the second sole cavity.

25. The golf putter of claim 23 wherein at least one of the sole inserts is formed substantially from a material having a specific gravity that is greater than a specific gravity of a material used to substantially form the putter body.

26. The golf putter of claim 25 wherein the second sole insert has a second specific gravity that is greater than a first specific gravity of the first sole insert.

27. The golf putter of claim 26 wherein the second specific gravity is at least approximately 100 percent greater than the first specific gravity.

28. The golf putter of claim 25 further comprising (i) a heel weight that is secured to the heel region, the heel weight being formed substantially from a material having a fifth specific gravity that is greater than the specific gravity of the material used to substantially form the putter body, and (ii) a toe weight that is secured to the toe region, the toe weight being spaced apart from the heel weight, the toe weight being formed substantially from a material having a sixth specific gravity that is greater than the specific gravity of the material used to substantially form the putter body.

29. The golf putter of claim 28 wherein the heel weight, the toe weight and the first sole insert each includes a center of gravity, and wherein the center of gravity of the heel weight, the toe weight and the first sole insert form vertices of a triangle having two sides that are approximately the same length.

30. The golf putter of claim 29 wherein the putter body includes a face region that strikes the ball during putting and a back region, and wherein the triangle defines a plane that slopes in a downwardly direction moving from the face region toward the back region.

31. The golf putter of claim 26 wherein the second sole insert has a volume that is less than approximately 50% of a volume of the first sole insert.

32. The golf putter of claim 26 wherein the putter body includes a face region that is adapted to strike the ball during putting, and wherein the entire second sole insert is positioned further from the face region than the first sole insert.

33. The golf putter of claim 23 wherein each of the sole inserts includes a corresponding exposed insert surface that is each entirely flush with the sole surface.

34. The golf putter of claim 23 wherein at least one of the sole inserts is positioned substantially symmetrically relative to the transition plane.

35. The golf putter of claim 23 wherein each of the sole inserts is positioned substantially symmetrically relative to the transition plane.

36. The golf putter of claim 23 further comprising a substantially circular upper region insert, and wherein the putter body includes an upper region that generally faces an opposite direction from the sole surface, the upper region including an upper region cavity that receives the upper region insert, the upper region insert having a third specific gravity that is lower than the second specific gravity.

37. The golf putter of claim 36 wherein the upper region insert has a diameter that is greater than approximately 1.00 inches and less than 1.60 inches.

38. A golf putter for putting a ball, the golf putter comprising:
a putter body including a sole region that defines a first sole cavity and a second sole cavity;
a first sole insert that is inserted into the first sole cavity, the first sole insert having a first specific gravity; and
a second sole insert that is inserted into the second sole cavity, the second sole insert having a second specific gravity that is greater than the first specific gravity.

39. The golf putter of claim 38 wherein the second specific gravity is at least approximately 100% greater than the first specific gravity.

40. The golf putter of claim 38 wherein the second specific gravity is at least approximately 500% greater than the first specific gravity.

41. The golf putter of claim 38 wherein at least one of the sole inserts is formed substantially from a material having a specific gravity that is greater than a specific gravity of a material used to substantially form the putter body.

42. The golf putter of claim 38 wherein the putter body includes a face region that is adapted to strike the ball while putting, and wherein the second sole insert is positioned further from the face region than the first sole insert.

43. The golf putter of claim 38 wherein the putter body has a centrally positioned transition plane that demarcates the putter body into a heel region and a toe region, the golf putter further comprising (i) a heel weight that is secured to the heel region, the heel weight being formed substantially from a material having a specific gravity that is greater than a specific gravity of a material used to substantially form the putter body, and (ii) a toe weight that is secured to the toe region, the toe weight being spaced apart from the heel weight, the toe weight being formed substantially from a material having a specific gravity that is greater than the specific gravity of the material used to substantially form the putter body.

44. The golf putter of claim 43 wherein the heel weight, the toe weight and the first sole insert each includes a center of gravity, and wherein the center of gravity of the heel weight, the toe weight and the first sole insert form vertices of a triangle having two sides that are approximately the same length.

45. The golf putter of claim 44 wherein the putter body includes a face region that strikes the ball during putting and a back region, and wherein the triangle defines a plane that slopes in a downward direction moving from the face region toward the back region.

46. The golf putter of claim 38 wherein the second sole insert has a volume that is less than 50% of a volume of the first sole insert.

47. The golf putter of claim 38 wherein the putter body includes a face region that is adapted to strike the ball during putting, and wherein the entire second sole insert is positioned further from the face region than the first sole insert.

48. The golf putter of claim 38 wherein the putter body has a centrally positioned transition plane that demarcates the putter body into a heel region and a toe region, and wherein at least one of the sole inserts is positioned substantially symmetrically relative to the transition plane.

49. The golf putter of claim 38 further comprising a substantially circular upper region insert, and wherein the putter body includes an upper region that generally faces an opposite direction from the sole surface, the upper region including an upper region cavity that receives the upper region insert, the upper region insert having a third specific gravity that is lower than the second specific gravity.

50. The golf putter of claim 49 wherein the upper region insert has a diameter that is greater than approximately 1.00 inches and less than 1.60 inches.

51. The golf putter of claim 38 wherein the first sole insert has a different shape than the second sole insert.

52. The golf putter of claim 38 wherein the second sole insert is substantially wedge-shaped.

53. A method manufacturing a putter head of a golf putter, the method comprising the steps of:

forming a first sole insert from a material having a first specific gravity;

positioning the first sole insert in a sole region of the putter head;

forming a second sole insert from a material having a second specific gravity that is greater than the first specific gravity; and

positioning the second sole insert in the sole region of the putter head.

54. The method of claim 53 wherein the second specific gravity is at least approximately 100% greater than the second specific gravity.

55. The method of claim 53 wherein the step of positioning the second sole insert includes positioning the second sole insert to be substantially symmetrical to a centrally positioned transition plane that demarcates the putter head into a heel region and a toe region.

56. The method of claim 55 further comprising the steps of (i) forming a heel weight from a material having a specific gravity that is greater than the first specific gravity, (ii) forming a toe weight from a material having a specific gravity that is greater than the first specific gravity, and (iii) positioning the heel weight in the heel region and positioning the toe weight in the toe region so that a center of gravity of the heel weight, a center of gravity of the toe weight, and a center of gravity of the second sole insert define a triangle having two sides that are approximately of equal length.

57. The method of claim 56 wherein the steps of positioning the heel weight and positioning the toe weight include defining a plane with the center of gravity of the heel weight, the center of gravity of the toe weight, and the center of gravity of the second sole insert that slopes downward as the plane moves from the center of gravity of the heel region and the center of gravity of the toe region toward the center of gravity of the second sole region.

58. A method manufacturing a putter head of a golf putter, the putter head having a centrally positioned transition plane that demarcates the putter head into a heel region and a toe region, the method comprising the steps of:

positioning a first sole insert in a sole region of the putter head so that a portion of the first sole insert is positioned in the heel region and a portion of the first sole insert is positioned in the toe region; and

positioning a second sole insert in the sole region of the putter head so that a portion of the second sole insert is positioned in the heel region and a portion of the second sole insert is positioned in the toe region.

59. The method of claim 58 further comprising the steps of forming the first sole insert from a material having a first specific gravity, and forming the second sole insert from a material having a second specific gravity that is greater than the first specific gravity.

60. The method of claim 59 further comprising the steps of (i) forming a heel weight from a material having a specific gravity that is greater than the first specific gravity, (ii) forming a toe weight from a material having a specific gravity that is greater than the first specific gravity, and (iii) positioning the heel weight in the heel region and positioning the toe weight in the toe region so that a center of gravity of the heel weight, a center of gravity of the toe weight, and a center of gravity of the second sole insert define a triangle having two sides that are approximately of equal length.